INFORMATION PAPER

CEIM-L
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SUBJECT: Total Cost of Ownership (TCO)

1. Purpose. To provide an overview on TCO.

2. Facts.

a. TCO is not new but has emerged as an important management issue in the past several years. The tremendous attention that TCO is receiving is placing pressure on information technology (IT) managers to lower the costs of supporting distributing computing, particularly as it relates to the enterprise's Personal Computer (PC)/Local Area Network (LAN) client server environment. With the increasing interest in TCO by corporate/company Chief Executive Officers and/or Chief Operating Officers, IT vendors are touting products and services purported to reduce the TCO for the organization's PC/LAN infrastructure.

b. TCO is a model that helps organizations understand the direct and indirect costs associated with owning and using IT components and their operational support services throughout the life cycle of the IT investment. TCO is the sum of all the "little costs" that go into acquiring, installing, operating and managing PCs or other workstation configurations, with their associated peripherals, operating system, and application software, in a networked environment. The collection of costs can be partitioned into a TCO model and used with a management methodology to form a decision support tool. The combination of a TCO model with a methodology provides an organization's management staff with an understanding of all costs associated with its PC/LAN distributed computing infrastructure, and with a decision making tool on how to best manage and improve it to deliver more value to the business from the IT investments. The implementation of a TCO model, and an associated TCO life cycle cost management methodology, makes TCO measurable, and directly usable to create actionable IT improvement plans.

c. An organization can define its own TCO model or adopt one of the many TCO models that have already been defined. Enterprises with a bias toward Microsoft products may want to use Microsoft's seven category model. Regardless of what TCO model is selected, it is important to identify what direct and indirect costs fall into which categories. For the purpose of this Information Paper, the seven category model will be used. The seven categories are:

- Direct (Budgeted)

  Hardware and Software (capital expenses and leases)

  Management (network, systems, storage and outsourced)

  Support (helpdesk, support, training, purchasing, travel and overhead)

  Development (Application & content: new, update and maintenance)

  Communications (lease line fees)

- Indirect (Unbudgeted)

  End user costs (self and peer support and casual learning)

Downtime (lost productivity due to planned and unplanned outages & helpdesk resolution time)

The value in the TCO model does not lie in its absolute numbers but in the framework itself. The model's framework allows for the comparison of implementing various information technologies and support services. The numbers themselves simply delineate the general magnitude of costs as well as show how the implementation of a specific technology may reduce costs in one category while driving up costs in another.

d. There are three common characteristics that lower the TCO for the organization's PC/LAN infrastructure. These characteristics are: (1) centralized management, (2) standardization with enforcement, and (3) feature complexity reduction at the desktop.

e. The bottomline is that PC/LAN infrastructures, as distributed computing environments, are expensive. A TCO model coupled with stong management methodologies, can provide the necessary structure to more fully understand the complexity and costs associated with making IT investment decisions. Without this understanding, an organization will eventually face disaster--it is only a matter of time.

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